

Date:
User:Wednesday, 9/26/2007 7:56:01 AM
Kim Johnston

Process Sheet

SPUT

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : SADDLE BILLET
Job Number : 34872	
Estimate Number : 10032	
P.O. Number :	Part Number : D6101001
This Issue : 9/26/2007 S.O. No. :	Drawing Number : D6101 REV A
Prsht Rev. : NC	Project Number : N/A
First Issue : 1/1 Type : MACHINED PARTS	Drawing Revision : A
Previous Run : 34643	Material :
Written By :	Due Date : 10/26/2007 Qty: 300 Um: Each
Checked & Approved By : <u>[Signature]</u>	
Comment : Est. B. 01.05.04 New Issue EC	

Additional Product

Job Number:



Seq. # Machine Or Operation: Description:

1.0

PG

PURCHASING



Comment: PURCHASING

Issue P/O: 4685

C 207109124

a) Description: Alluminum billet

b) 6.00" x 6.250" x 2.00" thick

c) Tolerance on length are +0.025"/-0.000" /E+/-0.008"

d) Grain direction along 6.00" length

e) Material: 7075-T7351 (QQ-A-250/12)

f) Material certification required

(300)

2.0

D6101001P

7075-T7351 2X6X6.25



Comment: Qty.: 1.0000 Each(s)/Unit Total: 300.0000 Each(s)

7075-T7351 2X6X6.25

3.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Receive & Inspect For Transit Damage

Ensure material certification is attached

P 8/10/07

(50)

4.0

QC6

DIMENSIONAL CHECK



Comment: DIMENSIONAL CHECK

Ensure Material certification comply to Dwg D

S 00/05/09 (250)

Date: Wednesday, 9/26/2007 7:56:01 AM
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SADDLE BILLET

Job Number: 34872

Part Number: D6101001

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: *CM*

88 08/05/14

6.0

QC21

FINAL INSPECTION/W/O RELEASE



08/05/15

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



U 08-05-14

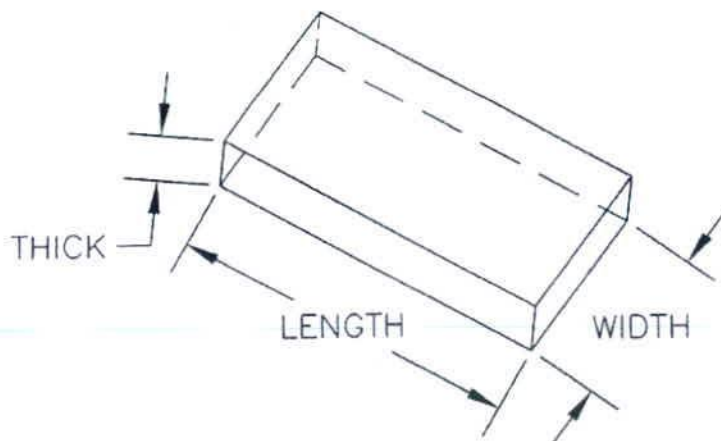




DESIGN CP	DRAWN BY CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED A	APPROVED S	DRAWING NO. D6101	Rev. A SHEET 1 OF 1
DATE 01.03.30		TITLE SADDLE BILLET, 7075	SCALE NTS
A	01.03.30	NEW ISSUE	

SPECIFICATION CONTROL DRAWING

RELEASED
01.04.23



PURCHASE MATERIAL ACCORDING TO THE FOLLOWING TABLE. SPECIFY ALLOY, LENGTH x WIDTH x THICK (+0.030/-0.000), AND GRAIN DIRECTION AS SHOWN.

TOLERANCES ON ALL DIMENSIONS ARE +0.030/-0.000.

ALL DIMENSIONS ARE IN INCHES.

Part No.	Alloy	Length	Width	Thick	Grain Direction
D6101-001	7075-T7351 (QQ-A-250/12)	6.000	6.250	2.000	Along 6.000 Length
D6101-003	7075-T7351 (QQ-A-250/12)	7.875	6.250	2.000	Along 7.875 Length
D6101-005	7075-T7351 (QQ-A-250/12)	5.000	8.250	2.500	Along 5.000 Length
D6101-007	7075-T7351 (QQ-A-250/12)	7.750	8.250	2.500	Along 7.750 Length
D6101-009	7075-T7351 (QQ-A-250/12)	8.700	8.250	2.500	Along 8.700 Length
D6101-011	7075-T7351 (QQ-A-250/12)	9.700	8.250	2.500	Along 9.700 Length
D6101-013	7075-T7351 (QQ-A-250/12)	10.100	8.250	2.500	Along 10.10 Length

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 34872

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02-20-'08 10:19 FROM-

T-863 P006/022 F-374

A M CASTLE & CO
3400 NO. WOLF ROAD
FRANKLIN PARK, IL 60131

ALUMINUM

Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586

CERTIFIED TEST REPORT

Serial Number
4121440

SOLD TO:
AM CASTLE & CO
3400 NO. WOLF ROAD
FRANKLIN PARK, IL 60131

CUSTOMER PO NUMBER: 01-40917		WORK PACKAGE:	CUSTOMER PART NUMBER: 6857 A97075-60		SHIP RUN/LOAD ID: 101220/15	GOV'T CONTRACT NUMBER:
KAISER ORDER NO: 1060479	LINE ITEM: 1	SHIP DATE: 14-FEB-2008	ALLOY: 7075	CLAD: BARE	TEMPER: T7351	PRODUCT DESCRIPTION: MILL FINISH PLATE
WEIGHT SHIPPED: 5772 LB	QUANTITY: 4 PCS EST.	B/L NUMBER: 2016460	GAUGE: 2.0000 IN	WIDTH: 48.500 IN	LENGTH: 144.500 IN	

Certified Specifications

AMS 4078/RevG
ASTM B 209/Rev06
BSS 7055/RevA
DPS 4.713/RevAH
GSS16100/RevG

AMS-QQ-A-250/12
ASTM B 594/Rev06
CMMP 025/RevR
EAC MS1011/RevE
MMS 159/RevN

AMS-STD-2154
BAC 5439/RevH
CSTI 006/RevC
GAMPS 9101/RevB
PS 21211/RevK

Test Code: 4297

Test Results

Lot: 429193A6 Cast 146

Drop 87

Ingot 2

(ASTM E8/B557)

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T7351	LT / 2 (Min:Max)	73.5 : 73.9 (507 : 510)	63.0 : 63.7 (434 : 439)	11.3 : 11.4

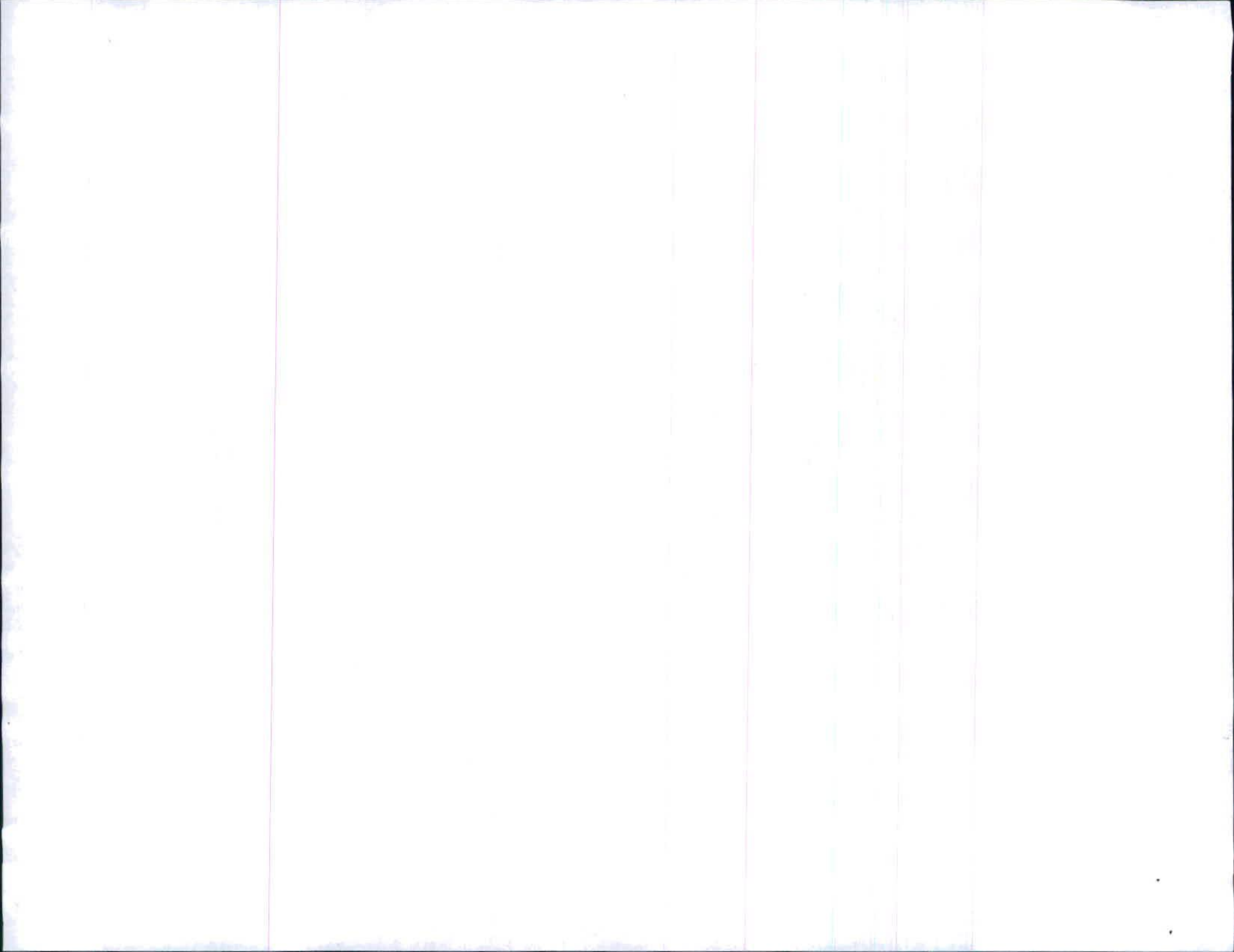
(ASTM E1004)

Conductivity %IACS :	40.6 Min	41.3 Max
(MS/M) :	23.5 Min	24.0 Max

(ASTM E1251)

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual	0.09	0.20	1.5	0.02	2.4	0.20	5.6	0.03	0.01	0.01	TOT 0.03

CASTLE METALS CORP.
DATE RCVD 2/20/08
IAC 6857
APPROVED BY [Signature]



**KAISER
ALUMINUM**Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586Serial Number
4121440

Lot: 433611A1 Cast 151

Drop 04

Ingot 4

(ASTM E8/B557)

Tensile: Temper
T7351Dir / # Tests
LT / 2 (Min:Max)Ultimate KSI (MPA)
74.0 : 74.1
(510 : 511)Yield KSI (MPA)
63.4 : 63.6
(437 : 439)Elongation %
11.7 : 12.1

(ASTM E1004)

Conductivity %IACS :
(MS/M) :41.2 Min
23.9 Min41.2 Max
23.9 Max

(ASTM E1251)

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual	0.08	0.16	1.5	0.01	2.5	0.20	5.8	0.02	0.01	0.01	TOT 0.04

ALLOY LIMITS

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER	MAX
7075 MIN	0.00	0.00	1.2	0.00	2.1	0.18	5.1	0.00	0.00	0.00	EACH	0.05
MAX	0.40	0.50	2.0	0.30	2.9	0.28	6.1	0.20	0.05	0.05	TOT	0.15

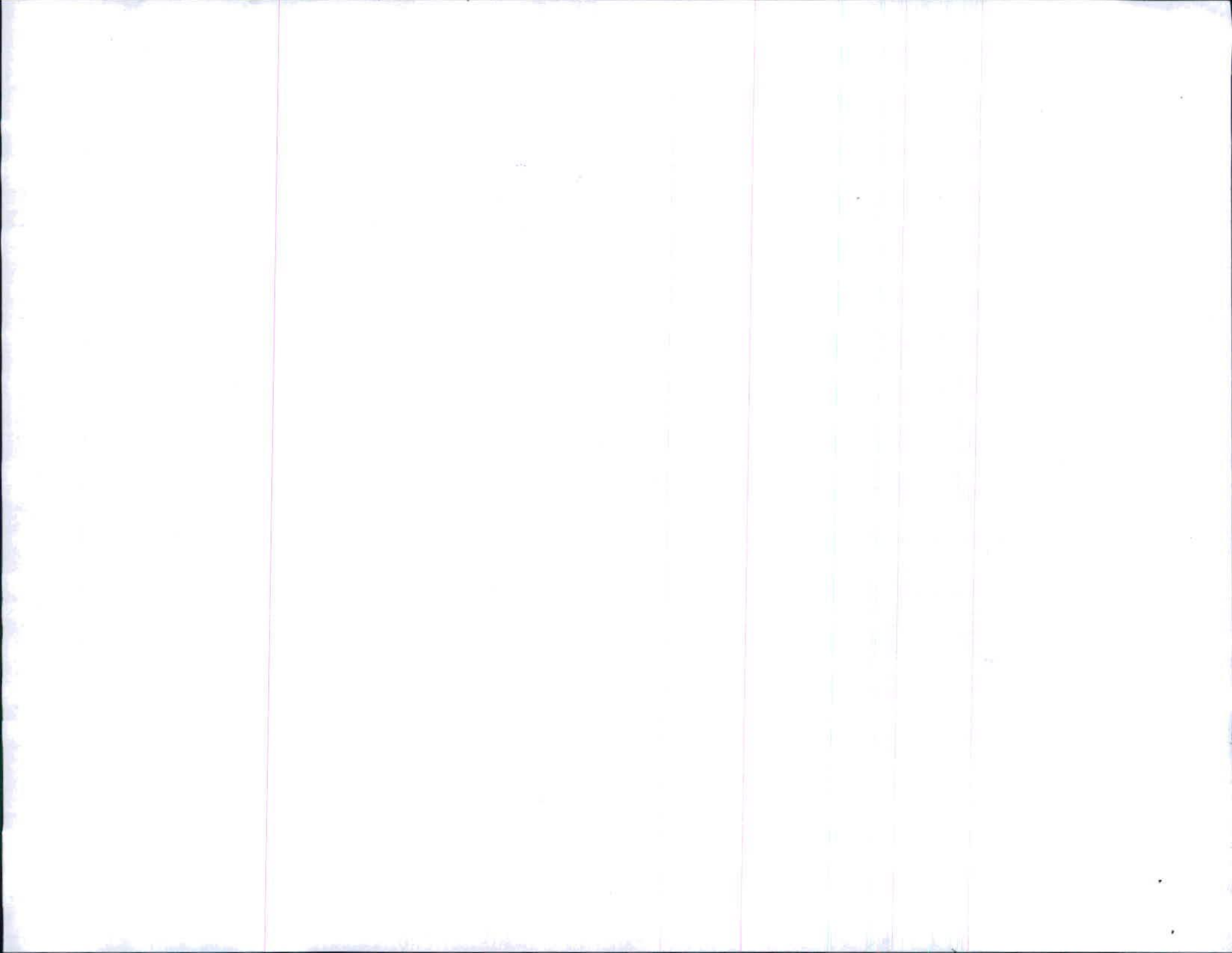
Aluminum Remainder**TEST NOTES**

Metal represented by this test report was immersion ultrasonically tested from one side and meets the Class A and Class B requirements of all specifications referenced on this test report.

CERTIFICATION

KAISER ALUMINUM FABRICATED PRODUCTS, LLC (KAISER) HEREBY CERTIFIES THAT METAL SHIPPED UNDER THIS ORDER WAS MELTED IN THE U.S.A OR CANADA AND MANUFACTURED IN THE U.S.A. AND HAS BEEN INSPECTED, TESTED, AND FOUND IN CONFORMANCE WITH THE REQUIREMENTS OF THE APPLICABLE SPECIFICATIONS AS INDICATED HEREIN. ALL METAL WHICH IS SOLUTION HEAT-TREATED COMPLIES WITH AMS 2772. ANY WARRANTY IS LIMITED TO THAT SHOWN ON KAISER'S STANDARD GENERAL TERMS AND CONDITIONS OF SALE. TEST REPORTS ARE ON FILE, SUBJECT TO EXAMINATION. TEST REPORTS SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF ALUMINUM FABRICATED PRODUCTS, LLC LABORATORY. THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULANT STATEMENTS OR ENTRIES ON THE CERTIFICATE MAY BE PUNISHED AS A FELONY UNDER FEDERAL LAW. ISO-9001:2000 CERTIFIED

BILL POYNOR, LABORATORIES SUPERVISOR

T-319 P009/026 F-523

5626343485

04-09-'08 03:28 FROM-CastleMetalsLA

CERTIFIED INSPECTION REPORT

Alcoa Inc.

PITTSBURGH, PA

DAVENPORT WORKS

Ship From: RIVERDALE, IA

We hereby certify that the material covered by this certificate has been inspected with, and has been found to meet, the applicable requirements described therein, including any specifications forming a part of the description and that samples representative of the material met the composition limits and had the mechanical properties shown on the face of this sheet.

Mark J. Vretho
Mark J. Vretho
Director of Manufacturing Davenport Works

Kenton P. Young
Kenton P. Young
Quality Assurance Manager

903156
Ship Date 2008-03-28
P.O. No./Govt Contract No. 02-29363

0
B.L. No. 2856433

Invoice No. 00000
Customer A M CASTLE & COMPA

Alcoa No. Item 5048440-1
Mfg Order DS-48440-1

Page 2

CQR: 0107687.26 -Specification Limits (cont.)

											Other	Other
Chemical Composition											Each	Total Aluminum
	Max	SI	FE	CU	MN	MG	CR	ZN	TI			
		0.40	0.50	2.0	0.30	2.9	0.28	6.1	0.20	0.05	0.15	
Alloy 7075	Min			1.2		2.1	0.18	5.1				
Lot: 570181	- Mechanical, Physical, Metallography, Quantometer Results											
	No->	UTS		TYS		EL4D						
	Test	KSI		KSI		PCT						
Temp Dir												
T7351 Long Transv.	2	72.7		61.4		10.3						
		73.1		61.7		10.3						

T7351 Elect Cond %IACS 39.8 40.8 PCT

Cast Number	Chemical	SI	FE	CU	MN	MG	CR	ZN	TI
H420601C	Actuals	0.05	0.28	1.7	0.01	2.5	0.20	5.6	0.02

This material was melted in the United States or a Qualifying Country [REF DFARS 225.872.1(a)]; it was manufactured in the United States

CASTLE METALS-LA

DATE REC'D 04/08/08

REC'D FROM ALCOA

APPROVED BY [Signature]

IAC 16857

